

A NEW SPECIES OF DONACIA FROM WASHINGTON

BY MELVILLE H. HATCH

*University of Washington**Donacia* (*Plateumaris*) *idola* Hatch, n. sp.

Length: Male 7.0-7.5 mm.; female 7.5-8.5 mm. Color metallic æneous, viridescent, or purpurescent; the head, antennæ, and ventral surface densely opaquely punctate; the tibiæ, the tarsi, the bases of the femora and the basal portions of antennal segments II to VII or VIII variably, and at times very obscurely, tinged with rufous. Head with short tempora behind the eyes, thence strongly constricted to form a "neck." Antennal segments IV to XI somewhat as in *pusilla* Say, not elongate as in *longicollis* Schaeffer. Antennæ extending about four segments beyond the base of the pronotum, a little longer in the male. Pronotum as long as wide, the anterior angles prominent, the lateral tubercle prominent and distinctly separated from the disc of the pronotum by an arcuate impression, the surface shining, finely punctate and rugose especially along the median line, which is strongly impressed from about the apical fifth or less to a punctiform impression at the basal fourth, behind which it is continued as a carina. Extending postero-obliquely laterad from the punctiform impression at the basal fourth of the median line is a deeply impressed transverse line, behind which the surface of the pronotum is somewhat smoother and more shining. Elytra shining; ante-median impression distinct; serial punctures moderate, finer towards apex, the intervals transversely rugose and finely sparsely but somewhat variably punctate. The side pieces of the prosternum coarsely strigate, somewhat more finely so anteriorly; the rest of the ventral surface and legs set with cinereous short pubescence; posterior femora extending to the apex of the third ventral segment, moderately clavate, narrower at base than at apex, set with a moderate sized tooth on its lower surface towards the apex. Abdomen with first ventral segment evidently but vaguely impressed at middle in male or very vaguely impressed in female; the last ventral segment impressed at middle of apex in male or unmodified in female; the last dorsal segment truncately bisinuate in male or obtusely rounded in female; the lower vaginal plate in the female acutely triangularly produced, the sides finely serrulate.

Type male, allotype female, and 5 paratypes: Chase Lake, Snohomish Co., Wash., May 9, 1934, M. H. Hatch; 45 paratypes, same locality as type but on various dates: May 14, 1930; April 27, 1931; April 26, 1933; May 9, 1934; April, 1936; April 29, 1936; April 26, 1938. The type and allotype are æneo-pur-

turescent in color. Type material in collection of author with two paratypes in collection of Mr. Albert R. Mead.

This species may be distinguished from most of the other Nearctic species of its subgenus by the deeply impressed transverse basal pronotal impression with a short median longitudinal carina just behind it. By careful attention to the extremely obscure rufous clouding at the base of the metafemora, I run this species in Schaeffer's key (Brooklyn Mus. Sci. Bull., III, 1925, pp. 123-125, 152-154) to *dubia* Schaeffer, from which, in addition to the characters above cited, it may apparently be distinguished by the darker antennæ and legs, the somewhat more evidently punctate pronotum and the well developed tooth on the metafemora. The posterior margin of the last dorsal abdominal segment in the male is bisinuate, whereas Schaeffer (l.c., p. 153) describes the condition in *dubia* as "truncate." Among the other species of this subgenus in which Schaeffer describes this condition, always or at times, as "truncate" in the male (*sulcicollis*, *flavipes*, *notmani*, *metallica*, *wallisi*, *dubia*, *neomexicana* and *longicollis*). I find that *flavipes* and *metallica* exhibit, at least at times, the same sort of a bisinuation of the last dorsal abdominal segment that I detect in *idola*, so that the complete accuracy of Schaeffer's descriptions in this particular cannot be relied upon. This feature will serve, however, to distinguish *idola* from *longicollis*, in which in my specimens the last dorsal segment in the male is really feebly emarginate.

Chase Lake is a small bog lake located about the center of Section 30, Township 27 North, Range 4 East, in Snohomish County, Washington, about two miles southeast of Edmonds and about seven miles north of the northern city limits of Seattle. It is the unnamed body of water that is mapped in this location on the 1/125,000 scale Seattle sheet of the United States Geological Survey topographic map. The lake is bordered by a wide zone of red sphagnum which serves as the habitat of one species of fly (*Chrysogaster nigrivittata* Loew*, family *Syrphidæ*), and three species of beetles in three different families, all with the same bright metallic bodies more or less matching the color of the sphagnum. The three beetles all proved to be undescribed species. The first, a carabid, *Platynus*

*Determined by Mr. Randall Latta.

belleri, was described by me in the Pan-Pacific Entomologist in 1933 (Vol. IX, pp. 120-121). The second, a species of *Eanus* of the family Elateridæ, is being described in the same journal by my friend, Mr. M. C. Lane. The third, a chrysomelid, is described above. Two of these species, the *Platynus* and the *Eanus*, have been taken on a similar sphagnum mat of a much larger lake, Lake Marie, about two miles east of Fall City in King County, Washington, and the *Platynus* has been recorded from sphagnum at Steelhead, near Mission City, in extreme southwestern British Columbia (Leech, Pan-Pac. Ent. XI, 1935, p. 122).

While the modern biologist is much more cautious about "explaining" such a phenomenon than his nineteenth century predecessor, the correlation between the color of the insects and the color of the sphagnum is not, in all probability, a pure coincidence. While each of the three beetles is not without metallic allies—this is especially true of *Donacia*, where a great many of the species are metallic—this simply means that stocks with such color potentialities were available for this particular evolution. The fact that each of the three beetles in three families is a peculiar species shows that the red sphagnum metallic beetle association is long established. There is probably a casual relationship involved, though its exact nature is quite beyond us at present.

A METHOD OF COLLECTING AMPHIZOA

Along Swamp Creek, a small stream six to thirty feet in width in the level country just north of Seattle, Washington, specimens of *Amphizoa striata* Van Dyke were taken by partially submerging and securing in place pitted water soaked cedar logs in shaded portions of the creek where the stream was narrow and the current was swift. The beetles were found in the cracks and crevices on the underside of the logs. Collections were made at intervals of a week or ten days in June and July of 1937 and close to a hundred specimens were secured.—Daniel E. Bonnell and Joseph Bruzas, Department of Zoology, University of Washington.